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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/620,912 | 07/15/2003 | Chaz Immendorf | NET-007 US | 8939 |

23639 7590 11/27/2006

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| EXAMINER |
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DOAN, PHUOC HUU

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| ART UNIT | PAPER NUMBER |
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2617

DATE MAILED: 11/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,912

Applicant(s)

IMMENDORF ET AL.

Examiner

PHUOC H. DOAN

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-7,14,15,22,23,26,36,37 and 43-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22,23,26,36,37,49-72,75-78 and 80-82 is/are allowed.
- 6) ☒ Claim(s) 1,4-7,14,15,43-48,73,74 and 79 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 4-7, 14-15, 43-48, 73-74, and 79 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 4-7, 14-15, 43-48, 73-74, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Bourlas (US Patent No: 6,577,863)** in view of **Abrishami (US Pub No: 2001/0046259)**.

As to claim 1, Bourlas discloses a method of supporting **voice-band** “a broadband wireless communication systems services for **voice, data, and video on the same bandwidth, see col. 3, lines 40-60**” modem-to-modem calls in a wireless communication system (See Abstract), the method comprising: detecting a call from a first voice band modem “**(MIC) modem interface card**” to a second voice

band modem over a wireless voice channel (col. 3, lines 41-65); establishing a connection with the first modem voice band in response to the detected modem call (col. 6, lines 15-35); receiving data from the first voice band modem over the connection (col. 6, lines 15-25); demodulating the received data (col. 6, lines 25-27); and relaying **“base station”** the demodulated data from a near end of the wireless broadband channel to a far end of the wireless broadband channel (col. 8, lines 5-13 **“wireless broadband connection between a base station and customer sites, the networks infrastructure of the wireless broadband, and hardware component; including cable; microwave link which indicated in Fig. 1, 2”**). However, Bourlas does not disclose wherein the first voice-band modem comprises a V.32 modem, a V.32b model, a V.34 modem, a V.34b modem, or a V.90 modem.

In the same filed of endeavor, Abrishami discloses wherein the first voice-band modem comprises a V.32 modem, a V.32b model, a V.34 modem, a V.34b modem, or a V.90 modem (col. 4, par. [0044-0045]). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide a voice band modem with V.32, or V. 90 modem as taught by Abrishami to the system of Bourlas in order to has the effective network throughput.

As to **claim 4**, Bourlas further discloses comprising: receiving the relayed data at the far end of the wireless broadband channel (Fig. 1, items 104, 112); modulating the received data (col. 6, 25-27); establishing a connection with the second voice band modem (**“plurality of modems installed in customers site, and plurality of modem installed in base station site”**, lines 6, lines 15-30); and transmitting the modulated data to the second voice band modem via the connection (lines 6, lines 15-30).

As to **claim 5**, Bourlas further discloses all the limitation in col. 9, lines 22-55, **“Fault Messages is a method to detect the failure of any modem in communication “**.

As to **claim 6**, Bourlas further discloses wherein the wireless broadband channel is not used for voice calls (col. 3, lines 52-55).

As to **claim 7**, Bourlas further discloses all the limitation in col. 1, lines 15-45 **“the functional of voice/data communication, the circuit switch is means for used voice channel, and packet switched is used for data channel”**.

As to **claim 14**, Bourlas further discloses wherein detecting the modem call comprises detecting tones (col. 6, lines 30-40)

As to **claim 15**, Bourlas further discloses all the limitations in col. 6, lines 15-30.

As to claim 43, Bourlas further discloses the method of claim 1 further comprising terminating the modem call over the wireless voice channel prior to establishing the connection between the near end of the wireless broadband channel and the first voice band modem (col. 7, lines 15-35).

As to claim 44, Bourlas further discloses the method of claim 1 wherein the wireless broadband channel is located between the first voice band modem and second voice band modem (col. 3, lines 41-65 “**CPE 110 communicates with the base station 104 over a wireless links**”).

As to claim 45, Bourlas further discloses the method of claim 1 wherein the wireless voice channel is dedicated to the modem call (col. 4, lines 15-35).

As to claim 46, Bourlas further discloses the method of claim 1 wherein the connection is established between the near end of the wireless broadband channel and the first voice band modem (col. 3, lines 55-65).

As to claim 47, Bourlas further discloses the method of claim 1 wherein the modem call is detected at a near end of the wireless voice channel (col. 4, lines 40-50).

As to claim 48, Bourlas further discloses the method of claim 1 wherein the modem call is detected at a far end of the wireless voice channel (col. 6, lines 30-45).

As to claim 73, this claim is rejected for the same reason as set forth in claim 1.

As to claim 74, this claim is rejected for the same reason as set forth in claim 1.

As to claim 79, Abrishami further discloses wherein the first voice-band modem is configured to receive an analog signal (col. 4, par. [0046]).

Allowable Subject Matter

4. Claims **22-23, 26, 36-37, 49-72, 75-78, and 80-82** allowed.

As to claim **22, 50, 65, 75**, the prior art or record either in alone, or combination do not disclose a wireless communication system comprising: a wireless voice channel having a near end and a far end; a wireless broadband channel having the same near end and the same far end as the wireless voice channel; a first modem linked to the near end of the wireless voice and broadband channel; a second modem linked to the far end of the wireless voice and broadband channels; a processor configured for determining a data transfer rate of a modem call from the first modem to the second modem over the wireless voice channel, and comparing the data transfer rate to a wireless voice channel; a third modem located at the near end of the wireless voice and broadband channels and configured for establishing a connection with the first modem, receiving data from the first modem over the connection, and demodulating the received data if the data transfer rate is greater

than the bandwidth of the wireless voice channel; and a first radio unit located at the near end of the wireless voice and broadband channels and configured for relaying the demodulated data over the wireless broadband channel if the data transfer rate is greater than the bandwidth of the wireless voice channel.

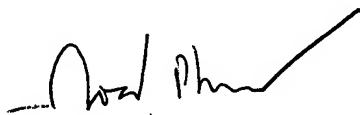
Dependent claims 23, 26, 36-37, 49-64, 66-72, 76-78, and 80-82 are allowed by dependent of the parent claims 22, 50, 65, and 75.

Conclusion


Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H. DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JOSEPH FEILD can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Phuoc Doan
11/20/06


JOSEPH FEILD
SUPERVISORY PATENT EXAMINER